



**SPECIMEN LABEL**  
REDUCED TO 50%

464302

ACTIVE INGREDIENT  
2,4,5-Trichlorophenoxyacetic Acid Propylene Glycol Butyl Ether Esters 92.5%  
INERT INGREDIENTS 7.5%  
2,4,5-Trichlorophenoxyacetic Acid Equivalent 60.2% - 6 lb/gal  
EPA Reg. No. 464-302 AA  
EPA Est. No. 464-MI 1

**AGRICULTURAL  
CHEMICAL**

**Do Not Ship or Store with Food,  
Feeds, or Clothing**

PRECAUCION AL Usuario: Si usted no lee ingles no use este producto hasta que la etiqueta haya sido explicada amplemente

TRANSLATION (TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

**ESTERON<sup>\*</sup> 245**  
**CONCENTRATE**  
*Multi-Use Brush and Weed Killer*

**CAUTION**  
KEEP OUT OF REACH OF CHILDREN  
MAY BE HARMFUL IF SWALLOWED  
MAY CAUSE IRRITATION  
Avoid Contact with Eyes,  
Skin and Clothing  
In case of eye contact, flush with water  
Wash thoroughly after handling

**Low-Volatile Brush and Weed Killer for Industrial, Forestry, Rangeland  
and Pasture Uses • For the Control of Trees, Brush and Broadleaf Weeds**

**113.5 L / 30 GAL**

**THE DOW CHEMICAL COMPANY**

AND SUBSIDIARIES

MIDLAND, MICHIGAN 48640, USA ZURICH, SWITZERLAND HONG KONG, BCC  
CORAL GABLES, FLORIDA 33134, USA SARNIA, ONTARIO, CANADA

\* Trademark of THE DOW CHEMICAL COMPANY

86-1069 PRINTED IN U.S.A. IN DECEMBER, 1975

REPLACES SPECIMEN LABEL 86-1069 PRINTED IN SEPTEMBER, 1975  
DISCARD PREVIOUS SPECIMEN LABELS  
REVISIONS INCLUDE: (1) LO-DRIFT® SPRAY THICKENING AGENT DELETED



Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for this pesticide  
registered under  
EPA Reg. No. **464-302**

**ACTIVE INGREDIENT:**  
2,4,5-Trichlorophenoxyacetic Acid, Propylene  
Glycol Butyl Ether Esters ..... 92.5%  
**INERT INGREDIENTS:** ..... 7.5%  
2,4,5-Trichlorophenoxyacetic Acid Equivalent 60.2% — 6 lb/gal  
E.P.A. Reg. No. 464-302-AA  
E.P.A. Est. No. 464-MI-1

**AGRICULTURAL  
CHEMICAL**

**Do Not Ship or Store with Food,  
Feeds, or Clothing**

**PRECAUCION AL Usuario:** Si usted no lee inglés,  
no use este producto hasta que la etiqueta haya sido  
explicada ampliamente.

**TRANSLATION: (TO THE USER:** If you cannot read  
English, do not use this product until the label has been  
fully explained to you.)

**ESTEEL**  
**CON**  
**Multi-Use**

**Low-Volatile Brush and We  
and Pasture Uses • For the**

# ESTERON 245 CONCENTRATE

Multi-Use Brush and Weed Killer

For Control of Trees, Brush and Broadleaf Weeds  
Contains Propylene Glycol Butyl Ether Esters of 2,4,5-T  
Acid Equivalent: 6 Pounds per Gallon

## DIRECTIONS

ESTERON 245 CONCENTRATE is recommended for industrial vegetation control in forest areas, on rights-of-way, such as communication lines, electrical powerlines, pipelines, highways, and railroads along fence rows, and on rangelands and pastures. This herbicide controls herbaceous and woody plants including such 2,4-D resistant species as ash, black gum, brambles, groundcherry, hawthorn, horsenettle, maple, mesquite, oak, osageorange, palmetto, poison ivy, pricklypear cactus, redbay, salmonberry, sweetgum, wild blackberry, wild rose, and certain species of Ribes. Do not apply ESTERON 245 CONCENTRATE where spray drift may contact nearby 2,4,5-T susceptible crops or other desirable plants or may contaminate water intended for irrigation or domestic purposes. Read and follow all Use Precautions given on this label.

## PREPARING THE SPRAY

Use only diesel oil, No. 1 or No. 2 fuel oil or kerosene where oil is recommended in the spray mixture.

**Oil Sprays:** Add ESTERON 245 CONCENTRATE to the required amount of oil in the spray tank or mixing tank and mix thoroughly. This mixture can be made at any time before actual use and no separation will occur. **NOTE:** Do not let any water or oil-water mixture sprays get into the ESTERON 245 CONCENTRATE or into the finished mixture as it may form a gel.

**Water Sprays:** Fill the spray tank about half full with clean water, add the required amount of ESTERON 245 CONCENTRATE and complete filling the tank. Mix thoroughly and continue agitation while spraying. **NOTE:** Do not let any water or spray get into the ESTERON 245 CONCENTRATE as a gel may be formed.

**Oil-Water Mixture Sprays:** When vigorous agitation is used, 1 gallon of ESTERON 245 CONCENTRATE will emulsify up to 10 gallons of oil in 100 gallons of spray mixture. First premix the ESTERON 245 CONCENTRATE and oil in a separate container. Do not allow any water or mixtures containing water to get into the ESTERON 245 CONCENTRATE or the premix. Fill the spray tank about half full with water, then slowly add the premix with continuous agitation and complete filling the tank with water. If the premix is put in the tank without any water, the first water added may form a thick "invert" (water in oil) emulsion which will be hard to break. As an alternate procedure, the oil may be added after the ESTERON 245 CONCENTRATE is mixed in the water, but highly vigorous mechanical agitation is required and a poor emulsion may be formed. The premix method is preferred.

**NOTE:** ESTERON 245 CONCENTRATE in water or oil-water sprays forms an emulsion, not a solution and separation may take place unless sprays are agitated continuously. Mechanical agitation is recommended.

## INDUSTRIAL BRUSH AND WEED CONTROL INCLUDING FORESTRY USES

### HIGH VOLUME SPRAYS

**Foliage Treatment:** For control of woody vegetation up to 8 feet tall, apply when foliage is well developed and plants are actively growing. Spraying during prolonged hot, dry weather or after leaves have lost their normal green color in the fall may not give satisfactory control. Use 2 to 2½ quarts of ESTERON 245 CONCENTRATE in 100 gallons of water and apply as a full coverage spray. Usually 100 to 200 gallons of spray per acre will be required, although dense stands of brush may require up to 400 gallons per acre. Completely wet all plant parts including leaves, stems and bark. Poison ivy, some brambles and many broadleaf weeds may be controlled using 1½ quarts of ESTERON 245 CONCENTRATE in 100 gallons of water.

To control grasses as well as broadleaf weeds and woody plants on conifer forest planting sites, ESTERON 245 CONCENTRATE may be used in a tank mixture with DOWPON™ grass herbicide. Consult label directions and precautions for DOWPON M to determine recommended use of this product.

**Basal Bark Treatment:** Brush and small trees can be controlled by spraying the basal parts of brush stems and tree trunks to a height of 12 to 15 inches from the ground line. Use a solution of 2 gallons of ESTERON 245 CONCENTRATE in 100 gallons (½ pint in 4 gallons) of oil. With certain resistant species, 2½ gallons of ESTERON 245 CONCENTRATE in 100 gallons (¾ pint in 3 gallons) of oil may be required. As only the basal portions of the brush are treated on a spot basis, the total amount sprayed per acre would not be expected to exceed 100 gallons. Knapsack or power equipment may be used, but complete wetting of the indicated area is necessary, particularly at the ground line. This means spraying until run down or run off to the ground line is noticeable. Old or rough bark requires more spray than young or smooth bark. Low pressures are desirable. Apply at any time including the winter months except when snow, ice or water prevent spraying to the ground line. Often delayed response and killing can be expected.

**Dormant Brush:** Treat any time after brush is dormant and most of the foliage has dropped. Spray should be concentrated at the base of stems and in addition, the upper parts of the stems should be broadcast sprayed enough to wet them.

Under root suckering species such as sumac, persimmon, sassafras and locust, also spray the ground area to control small root suckers that may not be readily visible. Mix 1 gallon of ESTERON 245 CONCENTRATE in 100 gallons of oil. Brush of average density and 4 to 6 feet high may take up to 150 gallons of spray mixture per acre.

**Stump Treatment:** Where growth is more than 6 to 8 feet tall, cut it close to the ground and spray the freshly cut stumps and stubs with 2 gallons of ESTERON 245 CONCENTRATE in 100 gallons (½ pint in 4 gallons) of oil, mixed thoroughly. For more resistant species, use 2½ gallons of ESTERON 245 CONCENTRATE in 100 gallons (¾ pint in 3 gallons) of oil. Wet thoroughly all exposed bark, as well as cut surfaces. This means spraying until run-down or run-off to the ground line is noticeable. Old or rough bark requires more spray volume than young or smooth bark. Apply at any time, including the winter months, except when ice, snow or water prevent spraying to the ground line. Best results are obtained on freshly cut stumps two inches across or larger. Adequate coverage normally requires from 10 to 100 gallons of spray per acre depending on density of stumps and stubs.

**Frill Treatment:** For large trees, make a singlehack girdle or frill of overlapping axe cuts completely around the tree as close to the ground as feasible. Spray the frill thoroughly using a mixture of 1½ gallons of ESTERON 245 CONCENTRATE in 100 gallons (½ pint in 3 gallons) of oil.

**Spot Foliage Treatment:** Use ½ pint of ESTERON 245 CONCENTRATE in 9 gallons of water and spray to wet all foliage, shoots, stems and bark without runoff. For Cactus: Use ½ pint of ESTERON 245 CONCENTRATE in three gallons of oil during hot summer period. Apply spray thoroughly to both sides of pads (leaves) and to joints and trunks.

## LOW VOLUME SPRAYS

Apply low volume sprays containing ESTERON 245 CONCENTRATE when foliage is well developed and plants are actively growing. For best results on woody species, soil moisture should be sufficient to promote foliar growth. Spraying during prolonged hot, dry weather or after leaves have lost their normal green color in the fall may not give satisfactory control. Make ground applications using equipment that will assure particle breakup and uniform coverage of the low spray volumes applied. Air applications should provide uniform coverage of target areas.

**Note:** Apply low volume sprays by air or ground only when there is little or no wind or other conditions that may cause spray to drift from area treated.

### Rights-of-way and Forest Site Preparation

**Foliage Treatment:** Use ¾ to 2 gallons of ESTERON 245 CONCENTRATE in enough water to make 10 to 30 gallons of total spray per acre. If desired, oil can be added to the spray in accordance with directions for Oil-Water Mixture Sprays given under PREPARING THE SPRAY.

**Use With TORDON® 101 Mixture:** ESTERON 245 CONCENTRATE may be used with TORDON 101 Mixture herbicide in a tank mix combination spray applied by aircraft for improved control of root suckering species and other species often not adequately controlled with 2,4,5-T. Use ¾ gallon of ESTERON 245 CONCENTRATE plus 2 gallons of TORDON 101 Mixture per acre by diluting with water to a total spray volume of 10 to 30 gallons per acre. Do not add oil or NORBAK® particulating agent to the spray. Aerial applications of the tank mixture should be made only with a helicopter mounted Micro-foil applicator or an equipment system providing equivalent drift control. **Note:** Do not plant conifer seedlings on treated areas for at least 6 months after applying 2 gallons of TORDON 101 per acre in such a tank mix. Read the directions and all the Use Precautions on both labels before using this tank mix.

**Basal Treatment Using Powered Knapsack Sprayer:** Mix 1 to 1½ gallons of ESTERON 245 CONCENTRATE with fuel oil or kerosene to make 20 gallons of total spray solution. Apply with a portable knapsack mistblower to all sides of lower brush stems including the root collar. Good coverage of the root collar is essential for best results. Run mist blower at ¼ to ½ throttle for best spray delivery and coverage. For maximum drift control use a basal nozzle attachment and do not raise nozzle above the horizontal position.

### Forest Conifer Release by Air or Ground Sprays

**Oil Spray:** Apply 1½ to 2 quarts of ESTERON 245 CONCENTRATE in about 10 gallons of oil per acre to control undesired hardwoods in dormant Douglas fir, true fir, hemlock and spruce. Rates higher than 1½ quarts may cause conifer injury. Do not use this spray on pines (note section below for pine recommendation). Apply before conifer bud break during late dormancy, usually February and March in the northwest. **NOTE:** Application of this spray after conifer bud break can injure the conifers.

**Water Spray:** Apply 1½ to 2 quarts of ESTERON 245 CONCENTRATE in 10 to 15 gallons of water per acre to control hardwood species in conifers including pines. Apply during the summer after the conifers cease spring growth and have hardened off. Rates higher than 1½ quarts may cause conifer injury.

Consult your State, Regional or Extension Forester for recommendations to fit local conditions.

## RANGELAND AND PASTURES

### RANGELAND - AIR APPLICATION FOR BRUSH CONTROL

Consult the Agricultural Experiment Station, your local Extension Service or Range specialist for best time to treat and need for retreatment in your area. Do not use from early boot to milk stage where grass seed production is desired.

**Mesquite:** Use ¾ pint of ESTERON 245 CONCENTRATE plus ½ to 1 gallon of oil in enough water to make 4 gallons of total spray per acre. Apply 40 to 90 days after first leaves appear.

**Sand Shinnery Oak:** Use ½ to ¾ quart of ESTERON 245 CONCENTRATE plus 1 gallon of oil in enough water to make 4 gallons of total spray per acre.

**Post and Blackjack Oaks:** Use 1½ quarts of ESTERON 245 CONCENTRATE plus 1 gallon of oil in enough water to make 4 to 6 gallons of total spray per acre.

### PASTURE - FOR BROADLEAF WEED CONTROL

Use 1½ to 2 quarts of ESTERON 245 CONCENTRATE per acre by aircraft or ground equipment in the amount of water needed to obtain uniform application. Apply when weeds are in full leaf and after grass is well established. Do not apply on stoloniferous grasses such as bent and bermuda or on forage legumes because these can be injured or killed. Do not apply on newly seeded areas and do not use from early boot to milk stage where grass seed production is desired. **NOTE:** Do not graze dairy animals on treated areas within 6 weeks after application. Do not graze meat animals on treated areas within 2 weeks of slaughter.

**SPECIMEN LABEL  
(BACK)  
REDUCED TO 80%**

## USE PRECAUTIONS

**AVOID CONTACT WITH 2,4,5-T SUSCEPTIBLE CROPS AND OTHER DESIRABLE BROADLEAF PLANTS:** ESTERON 245 CONCENTRATE is injurious to most broadleaf plants. Therefore, do not apply directly to or otherwise permit even minute amounts to contact cotton, grapes, tobacco, fruit trees, vegetables, flowers, ornamentals or other desirable plants susceptible to 2,4,5-T. Do not use in or near a greenhouse.

**DO NOT APPLY IN THE VICINITY OF COTTON, GRAPES, TOBACCO, TOMATOES OR OTHER DESIRABLE 2,4,5-T SUSCEPTIBLE CROPS OR ORNAMENTAL PLANTS.**

**DO NOT SPRAY WHEN WIND IS BLOWING TOWARDS SUSCEPTIBLE CROPS OR ORNAMENTAL PLANTS.**

**AVOID SPRAY DRIFT:** Applications should be made only when there is no hazard from spray drift since very small quantities of the spray which may not be visible, may severely injure susceptible crops during both growing and dormant periods. Use coarse sprays to minimize drift since, under certain weather conditions, fine spray droplets may drift a mile or more. The spray thickening agent NALCO TROL may be used with this product to aid in reducing spray drift. If used follow all use recommendations and precautions on the product label.

NALCO TROL Trademark of NALCO Chemical Company

**GROUND EQUIPMENT:** With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible, by applying 20 gallons or more of spray per acre, by using no more than 20 pounds spraying pressure with large droplet producing nozzle tips, by spraying when wind velocity is low, and by stopping all spraying when wind exceeds 6 to 7 miles per hour. Do not apply with hollow cone-type insecticide or other nozzles that produce a fine droplet spray.

**AERIAL APPLICATION:** With aircraft, drift can be lessened by applying a coarse spray, by using no more than 20 pounds spray pressure at the nozzles, by using straight stream nozzles directed straight back, by using a spray boom no longer than ¾ the wing span of the aircraft, and by spraying only when wind velocity is less than 5 mph.

**DO NOT APPLY BY AIRCRAFT WHEN AN AIR TEMPERATURE INVERSION EXISTS:** Such a condition is characterized by little or no wind and with air temperature lower near the ground than at higher levels. The use of a continuous smoke column at or near site of application is suggested to indicate a temperature inversion by layering of the smoke and to indicate direction and velocity of air movement.

At high temperatures, above 95 F., vapors from this product may injure susceptible plants growing nearby. Excessive amounts of 2,4,5-T in the soil may temporarily inhibit seed germination or plant growth.

Do not use around the home, recreation areas or similar sites. Do not use on susceptible grasses such as bent, except for spot spraying, nor on freshly seeded areas until grass has become well established. Most legumes are usually damaged or killed.

This product is toxic to fish. Keep out of lakes, streams, or ponds. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not contaminate irrigation ditches or water used for irrigation or domestic purposes.

If a tank mix is used containing TORDON 101 Mixture read and follow all use and handling precautions given on both labels.

This product can be stored in unheated building but if exposed to subfreezing temperatures, should be warmed to at least 40 F. and mixed thoroughly before using. Do not store near fertilizers, seeds, insecticides or fungicides. Do not reuse containers. To avoid injury to desirable plants, do not apply other agricultural chemicals with the same equipment used with ESTERON 245 CONCENTRATE, except as specified on this label.

Rinse equipment and containers and dispose of waste by burying in non-crop lands away from water supplies. Containers should be disposed of by punching holes in them and burying with waste or follow official disposal recommendations for container disposal.

Local conditions affect the use of herbicides. Consult your State Agricultural Experiment Station or Extension Service weed specialist for advice in selecting treatments from this label to best fit local conditions. Be sure that use of this product conforms to all applicable regulations. Apply this product only as specified on this label.

**NOTICE:** Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use but neither this warranty nor any other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.